



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,573	02/16/2001	Richard F. Creeth	03270- P0001A	4253
24126	7590	08/25/2005	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET STAMFORD, CT 06905-5619			CHEN, CHONGSHAN	
			ART UNIT	PAPER NUMBER

2162

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,573

Applicant(s)

CREETH, RICHARD F.

Examiner

Chongshan Chen

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RD

DETAILED ACTION

1. After carefully review the applicant arguments, the Office withdraws the Finality of the Office Action dated on November 3, 2004. The Office regrets any inconveniences due to the applicant. Claims 1-43 are pending in this application.

Claim Objections

2. The amendment filed on June 28, 2004 recites, “at least one dimension object defining relationships between data in the at least one cube object”. There is no support in the original disclosure for this amendment. Appropriate correction is required.

3. Claim 4 is objected to because of the following informalities: claim 4 states “wherein said at least one dataserver” repeatedly. Please delete one “wherein said at least one dataserver”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art in view of Castelli et al. (hereinafter “Castelli”, US 6,535,872 B1) and OLAP and OLAP Server Definitions (hereinafter OLAP, <http://dssresources.com/glossary/olaptrms.html>).

As per claim 1, Applicant admitted prior art discloses an object model for manipulating multidimensional data comprising:

a dataspace comprising at least one dataserer (specification, page 8, lines 9-15);

at least one cube object stored on each of said at least one dataserer (specification, page 8, lines 9-15, "... These standard, high-level metadata objects are found in nearly all OLAP databases"); and

at least one dimension object (specification, page 8, lines 9-15, "... These standard, high-level metadata objects are found in nearly all OLAP databases").

The applicant admitted prior art does not explicitly disclose each of said at least one cube object comprising at least one saved view of data. Castelli teaches each of said at least one cube object comprising at least one saved view of data (Castelli, col. 1, lines 44-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the object model of applicant disclosed prior art by incorporating saved view of data as disclosed by Castelli. The motivation being to provide more direct access to the data view of interests and improve the query processing time (Castelli, col. 1, lines 23-25).

Neither applicant admitted prior art nor Castelli explicitly discloses the at least one dimension object defining relationships between data in the at least one cube object stored on each of said at least one dataserer, each of said at least one dimension object comprising at least one saved subset of elements. OLAP discloses the dimension object defining relationships between data in the at least one cube object stored on each of said at least one dataserer, each of said at least one dimension object comprising at least one saved subset of elements (OLAP, page 4, dimension. Furthermore, Applicant's argument filed on June 9, 2005, page 6, lines 18-20,

Art Unit: 2162

discloses that dimension object is well known in the art, and dimension objects are objects which define relationship between data in other objects). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the applicant disclosed prior art and Castelli's combined object model by incorporating the dimension object as disclosed by OLAP. The motivation being to help the user synthesize enterprise information through comparative, personalized viewing, as well as through analysis of historical and projected data in various "what if" data model scenarios (OLAP, page 1).

As per claim 2, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach said at least one dataserer comprises a plurality of dataservers (OLAP, page 1).

As per claim 3, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach said at least one dataserer comprises at least one dataserer for a database having multidimensional financial data stored thereon (OLAP, page 1).

As per claim 4, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein said at least one dataserer comprises at least one dataserer for an OLAP database (OLAP, page 1).

As per claim 5, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein each of said at least one dimension object further comprises at least one saved element (OLAP, page 1 & 4).

As per claim 6, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein each of said at least one

Art Unit: 2162

dimension object further comprises at least one saved hierarchy (OLAP, page 5, Generation, Hierarchical; Hierarchical Relationships).

As per claim 7, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein at least one saved view of data comprises at least one saved value of data (OLAP, page 1 –3, Castelli, col. 1, lines 44-50).

As per claim 8, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein at least one saved view of data comprises at least one saved subset of data (OLAP, page 1 –3, Castelli, col. 1, lines 44-50).

As per claim 9, Applicant admitted prior art, Castelli and OLAP teach all the claimed subject matters as discussed in claim 1, and further teach wherein said dataspace comprises an entry point into said object model (Applicant admitted prior art, page 8, lines 9-15).

Claim 10 is rejected on grounds corresponding to the reasons given above for claims 1-9.

6. Claims 11-17 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art in view of Blackman et al. (hereinafter “Blackman”, US 6,360,229 B2).

As per claim 11, Applicant admitted prior art discloses a system for displaying data from a multidimensional database to a user, said system comprising:

a system computer (specification, Background of the Invention, page 1, line 7 – page 2, line 2);

a multidimensional database accessible by said computer, said multidimensional database having objects stored thereon (specification, Background of the Invention, page 1, line 7 – page 2, line 2).

Applicant admitted prior art does not explicitly disclose object model software executing on said system computer for instantiating and inflating a predefined group of specified objects up-front a first time said database is accessed, and for instantiating and inflating nonspecified objects which are not including in the predefined group of specified objects on demand as each of the nonspecified objects is accessed. Blackman teaches object model software executing on said system computer for instantiating and inflating a predefined group of specified objects up-front a first time said database is accessed (Blackman, col. 6, lines 35-38, 43-45, col. 6, line 66 – col. 7, line 26, col. 7, lines 58-63), and for instantiating and inflating nonspecified objects which are not including in the predefined group of specified objects on demand as each of the nonspecified objects is accessed (Blackman, col. 5, lines 3-8, col. 6, lines 46-50, please note the application program first loads ... then dynamically loads ... This is an adaptive instantiation and inflation. The “first loads” is the first stage of the adaptive instantiation and inflation, the “then dynamically loads” is the second stage. The data objects (DOs) are dynamically instantiated upon demand during execution, col. 8, lines 66-67, new object is instantiated upon demand during execution). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of applicant admitted prior art by incorporating the object model as disclosed by Blackman. The motivation being to improve techniques for accessing hierarchical data using object-oriented frameworks (Blackman, col. 4, lines 14-16).

As per claim 12, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach software executing on said computer for receiving from the user an indication of specified objects (Blackman, col. 6, lines 35-50).

As per claim 13, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach software executing on said computer for receiving from the user state information (Blackman, col. 7, lines 40-46).

As per claim 14, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach the specified objects comprise collections of objects (Blackman, col. 6, lines 35-50).

As per claim 15, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach the specified objects comprise specific properties of objects (Blackman, col. 6, line 35 – col. 7, line 67).

As per claim 16, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach wherein said multidimensional database comprises a database having multidimensional financial data stored thereon (specification, Background of the Invention, page 1, line 7 – page 2, line 2).

As per claim 17, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach wherein said multidimensional database comprises an OLAP database (specification, Background of the Invention, page 1, line 7 – page 2, line 2).

Claims 24-26 are rejected on grounds corresponding to the reasons given above for claims 11-17

7. Claims 18-23 and 27-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art in view of Blackman et al. (hereinafter “Blackman”, US 6,360,229

Art Unit: 2162

B2), Castelli et al. (hereinafter "Castelli", US 6,535,872 B1) and OLAP and OLAP Server Definitions (hereinafter OLAP, <http://dssresources.com/glossary/olaptrms.html>).

As per claim 18, Applicant admitted prior art and Blackman teach all the claimed subject matters as discussed in claim 11, and further teach a dataspace comprising at least one dataservert (specification, page 8, lines 9-15); at least one cube object stored on each of said at least one dataservert (specification, page 8, lines 9-15, "... These standard, high-level metadata objects are found in nearly all OLAP databases"); and at least one dimension object (specification, page 8, lines 9-15, "... These standard, high-level metadata objects are found in nearly all OLAP databases").

Neither applicant admitted prior art nor Blackman explicitly disclose each of said at least one cube object comprising at least one saved view of data. Castelli teaches each of said at least one cube object comprising at least one saved view of data (Castelli, col. 1, lines 44-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the applicant admitted prior art and Blackman's combined object model by incorporating saved view of data as disclosed by Castelli. The motivation being to provide more direct access to the data view of interests and improve the query processing time (Castelli, col. 1, lines 23-25).

The applicant admitted prior art, Blackman and Castelli's combined object model does not explicitly disclose the at least one dimension object defining relationships between data in the at least one cube object stored on each of said at least one dataservert, each of said at least one dimension object comprising at least one saved subset of elements. OLAP discloses the dimension object defining relationships between data in the at least one cube object stored on

Art Unit: 2162

each of said at least one dataserer, each of said at least one dimension object comprising at least one saved subset of elements (OLAP, page 4, dimension. Furthermore, Applicant's argument filed on June 9, 2005, page 6, lines 18-20, discloses that dimension object is well known in the art, and dimension objects are objects which define relationship between data in other objects). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the applicant disclosed prior art, Blackman and Castelli's combined object model by incorporating the dimension object as disclosed by OLAP. The motivation being to help the user synthesize enterprise information through comparative, personalized viewing, as well as through analysis of historical and projected data in various "what if" data model scenarios (OLAP, page 1).

Claims 19 and 20 are rejected on grounds corresponding to the reasons given above for claims 1-17.

As per claim 21, Applicant admitted prior art, Blackman, Castelli and OLAP teach all the claimed subject matters as discussed in claim 20, and further teach the indication of specified objects comprises a structured string variable (Blackman, col. 8, line 50-67).

As per claim 22, Applicant admitted prior art, Blackman, Castelli and OLAP teach all the claimed subject matters as discussed in claim 21, and further teach wherein the structured string variable comprises raw text separated by delimiters (Applicant admitted prior art, Fig. 4, which is labeled as prior art).

As per claim 23, Applicant admitted prior art, Blackman, Castelli and OLAP teach all the claimed subject matters as discussed in claim 21, and further teach wherein the structured

Art Unit: 2162

string variable comprises string in an extensible markup language (XML) format (Applicant admitted prior art, Fig. 4, which is labeled as prior art).

Claims 27-43 are rejected on grounds corresponding to the reasons given above for claims 1-23.

Response to Arguments

8. As per applicant's arguments regarding Blackman does not teach a predefined group of specified objects which are instantiated up-front a first time the database is accessed, and objects which are not included in the predefined group of specified objects which are instantiated on demand as each of the nonspecified objects is accessed have been considered but are not persuasive. Blackman teaches a predefined group of specified objects which are instantiated up-front a first time the database is access (Blackman, col. 6, lines 43-45, col. 6, line 66 – col. 7, line 26, col. 7, lines 58-63), and for instantiating and inflating nonspecified objects which are not including in the predefined group of specified objects on demand as each of the nonspecified objects is accessed (Blackman, col. 5, lines 3-8, col. 6, lines 46-50). Please note the application program first loads ... then dynamically loads ... This is an adaptive instantiation and inflation. The “first loads” is the first stage of the adaptive instantiation and inflation, and the “then dynamically loads” is the second stage. The data objects (DOs) are dynamically instantiated upon demand during execution (Blackman, col. 5, lines 3-8). Furthermore, new object is instantiated upon demand during execution (Blackman, col. 8, lines 66-67). This is the second stage of the adaptive instantiation and inflation. Therefore, the arguments are not persuasive.

Art Unit: 2162


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571) 272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen
August 19, 2005



JEAN M. CORRIELUS
PRIMARY EXAMINER